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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,949	03/16/2001	Toshihiro Shima	04783/018001	3378

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OSHA LIANG L.L.P.
1221 MCKINNEY STREET
SUITE 2800
HOUSTON, TX 77010

EXAMINER	
POON, KING Y	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/810,949	SHIMA, TOSHIHIRO	
	Examiner	Art Unit	
	King Y. Poon	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-15 and 30-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-6,8-15,30 and 34-44* is/are rejected.

7)☒ Claim(s) *7 and 31-33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/16/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4, 8-15, 34, 37-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurachi (US 6,181,436) in view of Gyllenskog (US 5,633,992).

Regarding claims 1: Kurachi teaches a printer (3, fig. 1) to be connected to a host machine (1, fig. 1), comprising: job accepting means (print data receiving device, column 9, lines 8-10) for accepting a print job (fig. 5) from a plurality of print job data (fig. 5) sent as reception data; extracting means (the software that accepts all the print jobs data as disclosed in fig. 5 and from the received data to generate individual print job as disclosed in fig. 5) extracts the print job data on a job unit basis from the reception data; assigning means (e.g., the component of the printer, column 9, lines 13-17, that recorded the reception time, column 10, lines 20-27; note, inherently, the reception time must be recorded by a reception means) for issuing identifying information (the reception time, column 10, lines 20-27) for the accepted job and assigning the issued identifying the information; generating means (print data converting device, column 9, line 10) for generating, as a process for the job, image data on the basis of the print job data; print means (output engine, column 9, lines 15-20) for control on print to a print recording medium on the basis of the generated image

data as a process for the job; and job managing means (control program, column 9, lines 10-18) for managing the accepted job on the basis of the identifying information (column 10, lines 20-27).

Kurachi does not disclosed how the print job are received.

Gyllenskog, in the same area of transmitting and receiving print data, teaches computer and printers are conventionally used RAW-mode physical channel (column 5, lines 52-67) for communicating data in series.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurachi to include: using RAW-mode physical channel for communicating data in series.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have provided Kurachi's system with a conventional communication method of communicating data used by printers and computer as taught by Gyllenskog because: (a) using a conventional method would save users a lot of money and effort in doing research and (b) it would have allowed Kurachi invention to be widely used by using his invention in conventional printer/computer system.

Regarding claim 4: Kurachi teaches the printer further comprising spool means (column 10, lines 45-50; the normal meaning of spool is to store data document in a queue, where it awaits its turn to be printed) for storing the print job data assigned with the job identifying information to be outputted in a predetermined order, said generating means interpreting (3b, 3c, and 3d, fig. 3) the print job data to be outputted from said spool means and generating image data.

Regarding claim 8: Kurachi teaches printer further comprising job manage request accepting means (the component of the printer that accepts print job management information such as a print job name from the host, column 9, lines 30-37) for accepting a job manage request (e.g., print job management request, column 9, lines 34-37, request of sending execution situation, column 9, lines 45-52, delete, stop, or setting priority of a print job, fig. 5) containing identifying information from the host machine (column 9, lines 32-36).

Regarding claim 9: Kurachi teaches wherein said job managing means specifies a predetermined job identifying information (column 9, lines 30-37, such as the print job name information will be managed under print job name, data size information will be managed under data size, etc.) contained in the accepted predetermined job manage request.

Regarding claim 10: Kurachi teaches wherein said job managing means controls at least any of said job accepting means, said generating means and said printing means to suspend from processing the job specified on the basis of the identifying information where the accepted job manage request is a job cancel request (stop or deletion of a print job, column 11, lines 50-53, fig. 5).

Regarding claim 11: Kurachi teaches wherein the respective ones of said job manage request accepting means, said generating means and said printing means process for a job other than the specified job where controlled by said job managing means to suspend a process for the specified job (user can select a tentative stop for

the process of the print job, column 11, lines 38-44; note: the stop is for the selected print job; therefore would not affect the process of the other print jobs).

Regarding claim 12: Kurachi, wherein said job managing means controls said printing means before controlling said job accepting means and said generating means (inherent properties of a CPU, column 7, lines 45-46; a CPU controls different devices at different time; i.e., at a certain time, the printing means must be controlled before other devices).

Regarding claim 13: Kurachi teaches wherein at least any of said job manage request accepting means, said generating means and said printing means notifies said job managing means of a status of a process for the job (execution situation, column 9, lines 50-51).

Regarding claim 14: Kurachi teaches wherein job managing means notifies a predetermined host machine (the computer that is requesting, column 9, lines 45-52) of the status of a process (execution situation, column 9, lines 50-52) notified from at least any of said job accepting means, said generating means and said printing means.

Regarding claims 15, 34, 37-44: Gyllenskog teaches wherein the RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface (column 5, lines 55-65).

3. Claims 5, 6, 30, 35, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurachi and Gyllenskog as applied to claims 1, 4 above, and further in view of Reilly et al (US 5,754,747).

Regarding claims 5, 30: Kurachi teaches the print jobs are written in a form of page description language to be transmitted to the printer for interpretation (column 9, lines 40-45).

Kurachi does not teach wherein said extracting means searches for predetermined language identifying information from among the series of reception data and specifies a language kind of the print job data to be extracted.

Reilly, in the same area of sending page description language print jobs to a printer for interpretation, teaches print job are written in different kinds of languages and it would require different interpreter to interpret the different kinds of language (column 6, lines 1-17. Note: In order for a machine to distinguish the different kind of languages, the print job must have language identifying information to be search by the print job extraction means.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurachi to include: the extracting means searches for predetermined language identifying information from among the series of reception print job data and specifies a language kind of the print job data to be extracted.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurachi by the teaching of Reilly because of the following reasons: (a) it would have allowed Kurachi's system to accept print job created using different languages from different computer systems of different users; (b) it would have generated more users using Kurachi's invention and thereby, increase

productivity to generate more profit; and (c) increase in productivity would reduce the cost of producing the product and thereby; consumer would benefit by paying a lesser price.

Regarding claim 6: Kurachi teaches wherein the extracting means extracts print job data from among the series of reception data on the basis of end-edge pattern data corresponding to the specified language kind.

Since Kurachi teaches to accept multiple print jobs, detecting the start and the end of a print job is inherent on Kurachi's system.

Note: the end-edge pattern data is being interprets as the data that would allow the system to detect the end of a print job.

Regarding claims 35, 36: Gyllenskog teaches wherein the RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface (column 5, lines 55-65).

Allowable Subject Matter

4. Claims 7, 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 7/11/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that non of the references teaches a job accepting means for accepting a print job from a plurality of print job data sent as a series of reception data via a RAW-mode physical channel from said host machine, and extracting means that extracts the print job data on a job-unit basis from the series of reception data, has been considered.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Kurachi teaches a printer (3, fig. 1) to be connected to a host machine (1, fig. 1), comprising: job accepting means (print data receiving device, column 9, lines 8-10) for accepting a print job (fig. 5) from a plurality of print job data (fig. 5) sent as reception data; extracting means (the software that accepts all the print jobs data as disclosed in fig. 5 and from the received data to generate individual print job as disclosed in fig. 5) extracts the print job data on a job unit basis from the reception data;

Kurachi does not disclosed how the print job are received.

Gyllenskog, in the same area of transmitting and receiving print data, teaches computer and printers are conventionally used RAW-mode physical channel (column 5, lines 52-67) for communicating data in series.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurachi to include: using RAW-mode physical channel for communicating data in series.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have provided Kurachi's system with a conventional communication method of communicating data used by printers and computer as taught by Gyllenskog because: (a) using a conventional method would save users a lot of money and effort in doing research and (b) it would have allowed Kurachi invention to be widely used by using his invention in conventional printer/computer system.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 30, 2005

KING Y. POON
PRIMARY EXAMINER

9/30/05